



EXHIBIT A

TRITONTM SURFACTANTS

UNION
CARBIDE



TRITON[®] X-100 Nonionic Surfactant

Product Description

TRITON[®] X-100 is a water-soluble, liquid, nonionic surfactant that has come to be recognized as the performance standard among similar products. It is an octylphenol ethoxylate with an average of nine to 10 moles of ethylene oxide and is a 100-percent active product.

Special Features

- Excellent wetting ability
- Excellent detergency
- Excellent grease and oil removal from hard surfaces
- Good thermal stability

Typical Physical Properties

Actives Content, wt %	100
Appearance	Clear liquid
Color, APHA	100
Viscosity, at 25°C, cP	240
Pour Point, °C (°F)	7 (45)
Specific Gravity at 25°C	1.065
pH, 5% aqueous solution	6
Cloud Point, 1% aqueous solution, °C (°F)	65 (149)
Density, lb/gal	8.9
Flash Point, Tag Open Cup, °C (°F)	>149 (>300)
HLB Value	13.5

UC-1459

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Union Carbide Corporation

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Product Data Sheet DEHYPOUND® HSC 5515

General characterisation

Chemical description
Proprietary Blend

Labeling information

INCI name(s)
Surfactant Concentrate

Registrations

Ingredient

CASR-No.

EINECS/ELINCS-No.

Trade Secret
Blend

Officially listed in / Quality conforms to
TSCA

Product properties

Appearance
Clear, Light Yellow Liquid

Example of use

D hypound HSC 5515 shows the following advantages:

- Possibility to reduce or eliminate the use of solvents (alcohols, glycol ethers etc.) without loss of performance.
- Premium detergency and gloss retention
- No streaking or visible film formation
- Possibility to make non gelling high performing super concentrated hard surface cleaners
- Supply chain simplicity. Few raw materials needed for many applications (ultra concentrates, floor-, all purpose-, glass cleaner
- Cost savings compared to systems containing solvents
- Very versatile due to the nonionic nature of Dehypound HSC 5515

Special Characteristics:

Completely biodegradable, improved hard surface detergency, low foaming, primarily naturally derived, and reduced streaking of high gloss surfaces.

Superior Hard Surface Detergency Low Foaming Surfactant Blend
Concentrated surfactant blend based on Alkyl Polyglycoside and proprietary Nonionic Defoaming Surfactant.

Characteristic values



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WITCO**MATERIAL SAFETY DATA SHEET**

Product name: WITCOLATE LCP

MSDS Number: 600000001297

Revision: 1.1 11/25/2000

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1. PRODUCT AND COMPANY IDENTIFICATIONProduct name: WITCOLATE LCP

Chemical name: Sodium alkyl sulfate

Supplier: Crompton Corporation
One American Lane
Greenwich, CT 06831-2559, USAEmergency telephone number: Crompton Corporation Emergency Response (24 hours)
732-826-6600
CHEMTREC (24 hours) 800-424-9300

For MSDS, Product Safety, or regulatory inquiries, call: Mike Curl 713-434-4421

Customer Service: 877-948-2601

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS#	CONCENTRATION
Alcohols, C10-16, sulfate, sodium salt	68585-47-7	30.0 %
Water	7732-18-5	69.0 %
Alcohols, C10-16	67762-41-8	1.0 %
Formaldehyde	50-00-0	< 0.06 %

3. HAZARDS IDENTIFICATION**APPEARANCE**

Physical state

Liquid

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Product Detail

Q-14-2

Tomah quaternaries are based on the reaction of high molecular weight aliphatic tertiary amines with an alkylating agent such as methyl chloride. Quaternaries are more cationic and more stable to pH change than other amine-based surfactants such as ethoxylated amines or amine acetate salts. The different molecular configurations give different solubility, emulsification, and cationic strength properties. Q-14-2 is a good grease emulsifier.

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Chemical Description:

Isodecyloxypropyl dihydroxyethyl
methyl ammonium chloride

Family:

Quaternary Amine

Net Weight:

425

Drum Type:

THP

Package:

Bulk

Applications:

All Purpose Cleaners
Corrosion Inhibitor
Industrial Cleaners
Intermediate Uses
Laundry
Low Foam Cleaners
Low VOC Cleaners
Solvent Cleaners
Transportation Cleaners
Quaternary Amine
All Products

Advantages:

- Efficient emulsifier of various materials
- Inhibits corrosion
- Boosts detergency of non-ionic surfactants
- Anti-static agents
- May be combined with other surfactants to produce a solvent-free degreaser
- Strongly cationic and substantive to surfaces

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Product Detail

AO-14-2

Tomah AO-14-2 is an ether amine oxide derived from a branched chain C10 alcohol. Tomah amine oxides are widely used in detergents to provide grease emulsification and soil suspension. Another use for amine oxides is in combination with quaternaries and non-ionics to form a synergistic surfactant base for use in household, institutional and industrial cleaning compounds. This system is considered a more environmentally safe alternative to solvent containing systems. In particular, it can replace the use of glycol ethers in cleaning compounds. This surfactant base provides the formulator with the ability to change the builder system to suit applications without having to change surfactants

Chemical Description:

bis-(2-hydroxyethyl) -
Isodecylxypropylamine oxide

Family:

Amine Oxide

Net Weight:

425

Drum Type:

THP

Package:

Bulk

Applications:

All Purpose Cleaners
Bathroom Cleaners
Dishwash Products
Glass Cleaners
Industrial Cleaners
Low Foam Cleaners
Low VOC Cleaners
Transportation Cleaners
Amine Oxide
All Products

Advantages:

- Moderate, flash foam
- Excellent grease emulsification
- Excellent soil suspension characteristics
- Compatibility in nonionic, cationic, anionic systems

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Product Detail

Alkali Surfactant

Alkali Surfactant is a unique di-propionate amphoteric that is used extensively in alkaline and acid cleaning formulations. It provides superior hydrotrope, wetting and detergent characteristics. Alkali Surfactant is a moderate foamer, is compatible with anionic surfactants, non-ionic surfactants, and cationic surfactants. It is exceptionally stable in alkali, acids, and highly concentrated electrolytes.

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Chemical Description:

beta.-Alanine, N-(2-carboxyethyl)-N-[3-(decyloxy)propyl]-, monosodium salt

Family:

Amphoteric

Net Weight:

450

Drum Type:

THP

Package:

Bulk

Applications:

Acid Cleaners
All Purpose Cleaners
Bathroom Cleaners
Dishwash Products
Industrial Cleaners
Laundry
Low VOC Cleaners
Solvent Cleaners
Transportation Cleaners
Amphoteric
All Products

Advantages:

- Exceptional stability in alkaline, acid and highly concentrated electrolytes
- Strong hydrotrope for non-ionic surfactants
- Moderate foam
- Good detergency
- Increased substantivity in the Zwitterionic range (typically pH 2-4)

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Product Detail

Amphoteric L

Amphoteric L is a mild surfactant typically used to generate, stabilize or boost foam. Amphoteric L offers good detergency and superior wetting characteristics. Amphoteric L has moderate stability in highly acidic or highly alkaline media.

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Chemical Description: Advantages:

proprietary

Family:
Amphoteric

Net Weight:
450

Drum Type:
THP

Package:
Bulk

Applications:
Acid Cleaners
All Purpose Cleaners
Bathroom Cleaners
Dishwash Products
Industrial Cleaners
Laundry
Low VOC Cleaners
Transportation Cleaners

Amphoteric
All Products

- Produces high foam
- Mild to skin
- Powerful wetting agent
- Good detergency
- Compatible with anionics, cationics and non-ionics

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